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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,443	08/01/2001	Yehuda Rest	00/21410	4731

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EXAMINER

NGUYEN, TU X

ART UNIT PAPER NUMBER

2618

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/918,443

Applicant(s)

REST ET AL.

Examiner

Tu X. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4,7,9-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1,4,7,9-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

Applicant's arguments with respect to claims 1-12, have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7, 9-13 and 15-17, are rejected under 35 U.S.C. 103(a) as being obvious over Davidson et al. (US Patent 6,735,184) in view of Vassilovski et al. (US Pub. 2003/0012159).

Regarding claims 1 and 12, Davidson et al. disclose a cellular telephone network comprising peripheral branches and a central high capacity data trunking region (see col.1 line 30 through col.3 line 44) and wherein said high capacity data trunking region comprises a satellite interface for a satellite connection using a TCP/IP protocol (see col.5 lines 40-50);

said satellite interface comprising an E1-TCP/IP converter being operable to receive E1 signaling (see col.5 lines 5-39) containing SS7 control signaling distributed therein at a predetermined data rate, said converter using a multiplexer for converting between the E1 signal and the TCP/IP signal (see col.5 line 40 through col.6 line 4);

wherein said high capacity trunking region comprises a terrestrial high capacity trunking connection in parallel with said satellite connection such that said satellite connection is usable back up said terrestrial connection (see abstract, "redundancy" corresponds to "back up").

Davidson et al. disclose fail to disclose containing SS7 control signaling distributed therein at a predetermined data rate.

In the related art, a terrestrial and satellite interface using IP protocol, Vassilovski et al. disclose SS7 control signaling distributed therein at a predetermined data rate (see par.019-020, SS7 is considered to have a typical data rate of 56 or 64Kbps). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Davidson et al. with the above teaching of Vassilovski et al. in order to support VOIP (as suggested by Vassilovski et al., see par.001).

Regarding claim 4, the modified Davidson et al. disclose wherein said high capacity trunking region comprises a terrestrial high capacity trunking connection in parallel with said satellite connection such that said terrestrial high capacity trunking connection is usable to back up said satellite connection (see Davidson et al., col.5 lines 5-39).

Regarding claim 7, the modified Davidson et al. fail to disclose said satellite link is via geostationary satellite; however, the Examiner takes an official notice that the concept satellite is a geostationary satellite is well known at the time the invention was made to provide a geostationary satellite in order to support synchronous signaling (as suggested by Davidson, see col.3 lines 25-27).

Regarding claim 9, the modified Davidson et al. disclose an extractor for extracting ss7 signaling, and a TCP/IP packet former for arranging extracted signaling into TCP/IP packets (see Vassilovski et al., par.020).

Regarding claims 10 and 16, the modified Davidson et al. disclose said converter comprises an encoder for encoding synchronization control data describing said E1 signal in headers of TCP/IP packets, thereby to enable subsequent synchronous reconstruction of said E1 signal (see Davidson, col.6 lines 5-8).

Regarding claim 11, the modified Davidson et al. disclose at least one of said peripheral branches comprises a satellite link and an E1 TCP/IP interface (see Davidson, col.5 lines 17-20).

Regarding claim 13, the modified Davidson et al. disclose said interfaces are arranged to provide said satellite link as a parallel path to a terrestrial data link (see col.5 lines 40-50).

Regarding claim 15, the modified Davidson et al. disclose at least one base station connected to at least one mobile switching center, said at least one mobile switching center being associated with at least one location register, and wherein said satellite link is arranged to connect said at least one mobile switching center with said at least one location register (see Davidson, fig.4, elements 445, 477).

Regarding claim 17, the modified Davidson et al. fail to disclose a buffer controllable according to said decoded synchronization information to recreate time delay relationships of said telephony protocol data stream; however, the Examiner takes an official notice that the concept a buffer and decode synchronization information to recreate time delay is well known

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at the time the invention was made to provide delay for an expected delay such a far distance between a satellite and a terrestrial network.

***Allowable Subject Matter***

Claim 18 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 18, the prior arts fail to teach "interfaces comprising a non-data carrying time slot remover for removing said non-data carrying time slots during conversion into said asynchronous protocol and a time slot regenerator for regenerating non-data carrying time slots during reconstruction", as cited in the claim.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



November 21, 2006



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